

## 2.1 PLANS FOR PERMITS AND DRAINAGE REVIEW

DDES is responsible for the review of all engineering aspects of private development proposals. Drainage review is a primary concern of engineering design. This section describes the **types of engineered drainage plans** required for engineering review at various permit review stages. *Refer to the DDES customer information bulletins for other details or requirements, such as the submittal and expiration periods set for each type of permit application, review fees, right-of-way use requirements, and other code requirements.*

### 2.1.1 PLANS REQUIRED FOR PERMIT SUBMITTAL

Most projects require some degree of drainage plans or analysis to be submitted with the initial permit application (see Table 2.1.2.A, p. 2-4). Subdivisions, urban plan developments (UPDs), and binding site plans require engineered **preliminary plans** be submitted with the initial permit application. Short plats require **plot plans** (may be engineered or non-engineered) to be submitted with the initial permit application. Preliminary plans and plot plans provide general information on the proposal, including location of critical areas, road alignments and right-of-way, **site** topography, building locations, land use information, and lot dimensions. They are used to determine the appropriate drainage conditions and requirements to be applied to the proposal during the drainage review process.

Single family residential building permits and short plats with one undeveloped lot require only a **site plan** with the initial permit application. Commercial permits require full **engineering plans** (see below). Other permits may have project specific drainage requirements determined by DDES or described in DDES customer information bulletins.

### 2.1.2 PLANS REQUIRED FOR DRAINAGE REVIEW

For drainage review purposes, **engineering plans** consist of the following:

1. **Site improvement plans** (see Section 2.3.1.2, p. 2-18), which include all plans, profiles, details, notes, and specifications necessary to construct road, drainage, and off-street parking improvements.
2. A **construction stormwater pollution prevention plan (CSWPPP)**, which identifies the measures and BMPs required to prevent the discharge of sediment-laden water and other pollutants associated with construction/*land disturbing activities*. The CSWPPP includes two component plans: an **erosion and sediment control (ESC) plan** (see Section 2.3.1.3, p. 2-25), which addresses prevention of sediment-laden discharges; and a **stormwater pollution prevention and spill (SWPPS) plan** (see Section 2.3.1.4, p.2-28), which addresses prevention of other pollutant discharges.
3. A **technical information report (TIR)** (see Section 2.3.1.1, p. 2-8), which contains all the technical information and analysis necessary to develop the site improvement plan and CSWPPP.

*Note: A landscape management plan is also included if applicable (see Section 2.3.1.5, p. 2-31).*

**Projects under Targeted Drainage Review** usually require engineering plans, except that only certain sections of the technical information report are required to be completed and the site improvement plan may have a limited scope depending upon the characteristics of the proposed project. The scope of these plans should be confirmed during the **project predesign meeting** with DDES. For other permits, such as single family residential permits, the scope of the targeted engineering analysis is usually determined during DDES engineering review.

**Projects without major drainage improvements** may be approved to submit a *modified site improvement plan*. Major drainage improvements usually include water quality or flow control facilities, conveyance systems, bridges, and road right-of-way improvements. For projects requiring engineering plans for road construction, a **modified site improvement plan** is not allowed. See Section 2.3.1.2, (p. 2-18) for further information.

## Plans Required for Small Project Drainage Review

*Small project drainage plans* are a simplified form of site improvement and ESC plans (without a TIR or a SWPPS plan) that may be prepared by a non-engineer from a set of pre-engineered design details. Small project drainage plans are only allowed for projects in Small Project Drainage Review but may be required for individual lots created by a subdivision project to show how required flow control BMPs and ESC measures will be applied to future lot construction.

For single family residential permits, the level and scope of drainage plan requirements are determined by DDES during drainage review. Some projects subject to Small Project Drainage Review may also require Targeted Drainage Review.

**TABLE 2.1.2.A DRAINAGE PLAN SUBMITTALS**

Type of Permit or Project	Plans Required with Initial Permit Application	Type of Drainage Review	Plans Required for Drainage Review
SUBDIVISIONS, UPDs, AND BINDING SITE PLANS	Plat Map <sup>(5)</sup> Preliminary Plans Level 1 Downstream Analysis	Full or Targeted Drainage Review <sup>(2)</sup>	<ul style="list-style-type: none"> <li>• Preliminary Plans<sup>(5)</sup></li> <li>• Engineering Plans<sup>(1)</sup></li> </ul>
		Large Project Drainage Review	<ul style="list-style-type: none"> <li>• Preliminary Plans<sup>(5)</sup></li> <li>• Master Drainage Plan<sup>(4)</sup> or Special Study</li> <li>• Engineering Plans<sup>(1)</sup></li> </ul>
SHORT PLATS	Plot Plan <sup>(5)</sup>	Small Project Drainage Review	Small Project Drainage Plans <sup>(3)</sup>
	Plot Plan <sup>(5)</sup> Level 1 Downstream Analysis	Small Project Drainage Review AND Targeted Drainage Review <sup>(2)</sup>	<ul style="list-style-type: none"> <li>• Small Project Drainage Plans<sup>(3)</sup></li> <li>• Engineering Plans<sup>(1)</sup></li> </ul>
		Full or Targeted Drainage Review <sup>(2)</sup>	Engineering Plans <sup>(1)</sup>
COMMERCIAL PERMITS	Engineering Plans <sup>(1),(2)</sup>	Full or Targeted Drainage Review	Engineering Plans <sup>(1)</sup>
SINGLE FAMILY RESIDENTIAL BUILDING PERMITS OR PERMITS FOR AGRICULTURAL PROJECTS	Site Plan <sup>(5)</sup> for Single Family Residential Building Permits	Small Project Drainage Review	Small Project Drainage Plans <sup>(3)</sup>
	Site Plan <sup>(5)</sup> or other project-specific plan as specified by DDES for <b>agricultural projects</b>	Small Project Drainage Review AND Targeted Drainage Review <sup>(2)</sup>	<ul style="list-style-type: none"> <li>• Small Project Drainage Plans<sup>(3)</sup></li> <li>• Engineering Plans<sup>(1)</sup></li> </ul>
		Full or Targeted Drainage Review <sup>(2)</sup>	Engineering Plans <sup>(1)</sup>
OTHER PROJECTS OR PERMITS	Project-specific (contact DDES or use DDES customer information bulletins)	Full or Targeted Drainage Review <sup>(2)</sup>	Engineering Plans <sup>(1)</sup>
<b>Notes:</b> <sup>(1)</sup> Submittal specifications for <b>engineering plans</b> are detailed in Section 2.3.1 (p. 2-7). <sup>(2)</sup> Submittal specifications for <b>Targeted Drainage Review</b> are found in Section 2.3.2 (p. 2-32). <sup>(3)</sup> Specifications for submittal of <b>small project drainage plans</b> are found in Appendix C, <i>Small Project Drainage Requirements</i> (detached). <sup>(4)</sup> Specifications for submittal of <b>master drainage plans or special studies</b> are found in the King County publication titled <i>Master Drainage Planning for Large or Complex Site Developments</i> . <sup>(5)</sup> Submittal specifications for these plans are found in the application packages and in DDES Customer information Bulletins.			